

REMARKS

The office action has been carefully reviewed and further amendments have been made to the independent claims 1, 8, 14 and 17 in an effort to place the application in condition for immediate allowance.

The office action indicates that claims 1-19 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Moh in view of Fischer. Also, there is a subsequent paragraph that indicates that claims 1-4, 6, 8, 10-12 and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Moh. It is believed that the latter 102 rejection is an inadvertently included rejection for the reason that the examiner admits that Moh does not disclose the element of the claim "a resend data unit communication (as taught by Fischer at column 22, line 56 through column 23, line 11 and column 23, lines 31-65). Since by definition an anticipation requires that all elements be present in a single reference, it is legally impossible for Moh and Fisher to be combined in an anticipation rejection. To the extent that the anticipation rejection was intended to be made by the examiner, reconsideration and revocation of this rejection is respectfully requested.

In the prior office action, the examiner did reject all claims as being anticipated by Moh, but the present rejection is based upon a combination of Moh and Fischer, with the examiner admitting that Moh fails to anticipate the independent claims of this application.

In the specification, the applicant described the prior art methods of insuring reliability of packet transmissions and indicated that they fall within two categories, namely, a flit-level error detection and correction and end-to-end transmission assurance. This is set forth in the first full paragraph of page 2. Cyclic redundancy check and error correcting codes can check the contents of a flit for errors in transmission and depending on the code used in the nature of the error can make corrections. This approach works well to handle error events that operate on the bit level such as electrical noise coupling on the wires used to transmit the data, or random bit flipping in the data portion of the flit.

The end-to-end transmission assurance involves an acknowledgement sequence. With this method, the receiver of a packet immediately sends an

acknowledgement packet to the sender when the complete package is received. The sending agent must hold a complete copy of each packet sent until the acknowledged packet is received. This approach is stated to work except that it has a high overhead in that the sending agent must store all packets that are in flight and must use some type of timeout capability to determine if the receiver has not gotten the packet.

The present invention provides a low cost way for performing error detection and correction and comprises a sequence identifier that is placed in each flit prior to transmission which is examined by the receiving agent and if the sequence identifier is incorrect, request that the flit be resent.

It is a low cost system of providing error correction for the reason that it operates on an individual flit-by-flit transmission and receipt. There is no complex mechanism that requires extensive memory in the event that multiple flits need to be resent because it is done on a flit-by-flit basis. This is now reflected in the applicants' claims. More particularly, claim 1 is now directed to a low cost method of providing error detection and correction and comprises, *inter alia*, a sending agent inserting a sequence identifier in each data unit, wherein said sequence identifier is the only information that is used to provide error detection as well as the element, and the receiving agent initiating a resend data unit communication with the sending agent before the sending agent sends a subsequent data unit if the receiving agent determines that a received data unit has an incorrect sequence identifier.

As argued in the response to the previous office action, Moh does not operate in this manner. The examiner now combines it with Fischer which is stated to have an organizationally unique identifier (OUI), a destination address (CDID), a source identifier (CSID) as well as a frame type field 176 (which if unrecognized, results in the data being ignored). The header also includes an ending frame number, a missing frame number as well as bandwidth allocation, required information, allocation flags as well as other data. Additionally, not only does Fischer use the sequence number, but it also uses a CRC check as is shown in Fig. 8. This is certainly not a low cost system and operates in a much different manner than the method as claimed in claim 1. Since claim 1 indicates that the sequence identifier is the *only*

information that is used to provide error detection, Fischer is not believed to teach or suggest this method as claimed.


Because all of the independent claims have similar language, the above arguments are also believed to apply to claims 8, 14 and 17.

Since the dependent claims necessarily include the features of the independent claims from which they depend and in addition define other features or functionality not found in those claims, it is believed that the dependent claims are also in condition for immediate allowance. For the foregoing reasons, reconsideration and allowance of all claims is respectfully requested.

For the foregoing reasons, reconsideration and allowance of all pending claims is respectfully requested.

Respectfully submitted,

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